

Attachment F – Fact Sheet – Table of Contents

| | | |
|-------|---|------|
| I. | Permit Information..... | F-2 |
| II. | Facility Description..... | F-3 |
| III. | Applicable Plans, Policies, & Regulations | F-7 |
| IV. | Rationale for Effluent Limitations and Discharge Specifications | F-10 |
| V. | Rationale for Receiving Water Limitations | F-19 |
| VI. | Rationale for Monitoring & Reporting Requirements | F-21 |
| VII. | Rationale for Provisions..... | F-23 |
| VIII. | Public Participation..... | F-24 |

ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

A. The following table summarizes administrative information related to the facility.

| | |
|---|--|
| WDID | 8 330101001 |
| Discharger | City of Beaumont |
| Name of Facility | Wastewater Treatment Plant No. 1 |
| Facility Address | 715 W. 4th Street |
| | Beaumont, CA 92223 |
| | Riverside County |
| Facility Contact, Title and Phone | Alan Kapanicas, City Manager, (951) 769-8534 |
| Authorized Person to Sign and Submit Reports | Alan Kapanicas, City Manager, (951) 769-8534 |
| Mailing Address | 550 E 6th Street, Beaumont, CA 92223 |
| Billing Address | SAME |
| Type of Facility | POTW |
| Major or Minor Facility | Major |
| Threat to Water Quality | 1 |
| Complexity | A |
| Pretreatment Program | N |
| Reclamation Requirements | Producer |
| Facility Permitted Flow | 4 mgd |
| Facility Design Flow | 4 mgd |
| Watershed | Santa Ana River Watershed |
| Receiving Water | Cooper's Creek, San Timoteo Creek, Santa Ana River, San Timoteo Groundwater Management Zone, and Beaumont Groundwater Management Zone |
| Receiving Water Type | Creek, river and groundwater |

B. The City of Beaumont (hereinafter Discharger) owns Wastewater Treatment Plant No. 1 (hereinafter Facility), a tertiary treatment facility. Urban Logic Consultants, a private contractor, operates the Facility for the City. The facility receives and treats domestic and commercial/industrial wastewater generated within the City of Beaumont and Highland Springs (portions of the unincorporated area of Cherry Valley). The discharges from the facility are currently to Cooper's Creek, a tributary of San Timoteo Creek, Reach 3 and regulated under Order No. 00-10, NPDES No. CA80105376. The Discharger proposes to expand its Facility's treatment capacity from 2 to 4.0 million gallons per day (MGD). The expansion will also include the construction of a regional recycled water system. Order No. 00-10 is being renewed to update and include this proposed increase in the Facility's

treatment capacity and increase in recycled water use. With the construction of the recycled water system, most of the tertiary treated wastewater will be recycled, and tertiary treated wastewater from the Facility will be discharged only intermittently to Cooper's Creek..

- C. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on October 28, 2004. Supplemental Information was requested and received on July 21, 2005.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

As discussed above, the Discharger proposes to expand the existing treatment capacity of the facility from 2 MGD to 4.0 MGD average dry weather flow. The current plant expansion design incorporates the same treatment processes as the existing plant. The wastewater treatment system consists of bar screens, activated sludge extended aeration, equalization, clarification, dual media sand filtration, UV disinfection and sludge thickening/drying. Sludge from the facility is dewatered (15-20 percent solids) and stored in drying beds prior to disposal. The Facility will produce tertiary treated water that complies with requirements established in Title 22 of the California Code of Regulations for unrestricted non-potable water reuse.

The existing Facility utilizes sludge thickeners, sludge centrifuge (for mechanical drying and thickening) and drying beds to dewater sludge.

B. Discharge Points and Receiving Waters

The treatment facility and discharge points are located in an unincorporated area of Riverside County, within the portions of Section 9, T3S, R1W, SBB&M. The discharger currently discharges tertiary treated effluent to Cooper's Creek at latitude 33°55'24"N and longitude 116°59'34"W. This unlined reach of the Creek overlies and recharges the San Timoteo Groundwater Management Zone (GMZ). While the discharge is to Cooper's Creek, it is considered a *de facto* discharge to San Timoteo Creek and the San Timoteo Management Zone.

The discharger is proposing to construct a 0.2 to 0.5 MGD capacity recycled water reservoir at the existing wastewater treatment facility and is currently working with the Beaumont-Cherry Valley Water District (BCVWD) to determine the final size of this reservoir. A pump station will be constructed to pump recycled water from this reservoir into the BCVWD non-potable water distribution system. The pump station will be designed and constructed so that it can be expanded over time. The location of the proposed recycled water reservoir and pump station will be approximately 33°55'25"N and 116°59'38"W, which is just northeast of the existing point of discharge to Cooper's Creek.

BCVWD estimates that there will be an average demand for non-potable water of about 2.9 MGD by 2010 and 5.0 MGD by 2025. BCVWD will take all the recycled water that is available and blend it with untreated state project water. BCVWD will then deliver this water for irrigation to Oak Valley Golf Course, Highland Springs North Golf Course, PGA Oak Valley Golf Courses, Sunny Cal Egg Ranch, and for irrigation of parkways, medians, cemeteries, and parks.

The Discharger also plans to construct a 4 million gallon recycled water reservoir. The site for this reservoir has not been finalized yet.

As previously described (I.B., above), with the construction of the recycled water system, most of the Discharger's recycled water will be recycled and there will be only intermittent discharges to Cooper's Creek. The Discharger currently proposes to use the recycled water for landscape irrigation and other similar uses in areas overlying the Beaumont Management Zone. The Discharger may propose recycled water recharge projects in the future¹.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations contained in the previous Order 00-10 are as follows:

| Parameter (units) | Effluent Limitation | | | | | |
|---------------------------------|---|--------------------|---------------|-----------------------|------------------|-------------|
| | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Maximum | 12-month Average | Single Test |
| Discharge Flow (MGD) | -- | -- | 1.4 | -- | -- | -- |
| BOD (mg/L) | 20 | 30 | -- | -- | -- | -- |
| TSS (mg/L) | 20 | 30 | -- | -- | -- | -- |
| Total Inorganic Nitrogen (mg/L) | | | -- | -- | 10 | -- |
| pH (pH units) | -- | -- | 6.5 – 8.5 | | | -- |
| Total Dissolved Solids (mg/l) | -- | -- | -- | -- | 490 | -- |
| Total Coliform | MPN of 23/100 ml. in any Calendar Month | MPN of 2.2/100 ml. | | | | |

2. Self-Monitoring Report (SMR) Data for previous Order 00-10 are as follows:

| Parameter (units) | Monitoring Data from 1-2000 To 5-2005 | | |
|----------------------|---------------------------------------|--------------------------|-------------------------|
| | Highest Monthly Discharge | Average Weekly Discharge | Highest Daily Discharge |
| Discharge Flow (MGD) | 1.835 | 1.975 | 2.354 |
| BOD (mg/L) | 9.2 | 15.6 | 24 |
| TSS (mg/L) | 7.1 | 12.3 | 22 |

¹ This Order would need to be reopened and revised to specify appropriate recharge requirements, unless such requirements are specified in separate waste discharge requirements.

| Parameter (units) | Monitoring Data from 1-2000 To 5-2005 | | | |
|---------------------------------|---------------------------------------|---------|--------------------------------|-------------------------------|
| | Highest Monthly Discharge | Average | Highest Weekly Discharge | Average Daily Discharge |
| Total Inorganic Nitrogen (mg/L) | | | | 12 |
| pH (pH units) | 8 | | 8.15 | 8.5 |
| Total Dissolved Solids (mg/l) | | | | 490 |
| Total Coliform | 27.5 | | 101.6 | 500 |
| Selenium | 10 | | | |

D. Compliance Summary

Based on a review of effluent monitoring data submitted by the discharger for the period from 20000 through 2005, the wastewater discharged from the wastewater treatment facility was in violation of the following effluent limitations:

| Parameter | Unit | Date | Value | Permit Limit | Reason for Violation | Corrective Measures |
|-------------------------------|-----------|------------|-------|--------------|---|---|
| Chronic Toxicity Reproduction | TUc | 7/11/2000 | 10.00 | 1.7 | An investigation conducted by staff found a local orange juice factory was discharging an organic phosphate into the collection system. | The orange juice factory was directed to cease discharging the organic phosphate. |
| Chronic Toxicity Reproduction | TUc | 9/7/2000 | 3.13 | 1.7 | An investigation conducted by staff found a local orange juice factory was discharging an organic phosphate into the collection system. | The orange juice factory was directed to cease discharging the organic phosphate. |
| Chronic Toxicity Reproduction | TUc | 9/19/2000 | 3.13 | 1.7 | An investigation conducted by staff found a local orange juice factory was discharging an organic phosphate into the collection system. | The orange juice factory was directed to cease discharging the organic phosphate. |
| Chronic Toxicity Reproduction | TUc | 10/4/2000 | 5.56 | 1.7 | An investigation conducted by staff found a local orange juice factory was discharging an organic phosphate into the collection system. | The orange juice factory was directed to cease discharging the organic phosphate. |
| Chronic Toxicity Reproduction | TUc | 10/25/2000 | 1.79 | 1.7 | An investigation conducted by staff found a local orange juice factory was discharging an organic phosphate into the collection system. | The orange juice factory was directed to cease discharging the organic phosphate. |
| Chronic Toxicity Reproduction | TUc | 1/9/2001 | 5.56 | 1.7 | Investigation by staff found that the effluent sampler tubing was replaced with non-food grade vinyl tubing. | The tubing was replaced with food grade tubing. |
| Chronic Toxicity Reproduction | TUa | 4/3/2001 | 1.79 | 1.7 | Investigation by staff found that the effluent sampler tubing was replaced with non-food grade vinyl tubing. | The tubing was replaced with food grade tubing. |
| Chronic Toxicity Reproduction | TUa | 4/17/2001 | 3.13 | 1.7 | Investigation by staff found that the effluent sampler tubing was replaced with non-food grade vinyl tubing. | The tubing was replaced with food grade tubing. |
| Coliform Bacteria | MPN/100ml | 1/10/2002 | 30 | 23 | Violation occurred as a result of improper sampling techniques. | Operators were instructed on proper sampling procedures. |

| Parameter | Unit | Date | Value | Permit Limit | Reason for Violation | Corrective Measures |
|---|-----------|----------------|-------|--------------|---|---|
| Coliform Bacteria | MPN/100ml | 1/23/2002 | 500 | 23 | Violation occurred as a result of improper sampling techniques. | Operators were instructed on proper sampling procedures. |
| Average Turbidity in 24 hour period | NTU | 5/16/2002 | >2 | 2 | Investigation by staff found excessive septage dumping by vacuum truck haulers. | Limits were placed to minimize receiving of septic waste. |
| Chronic Toxicity Reproduction | TUc | 6/4/2002 | 1.79 | 1.7 | Cause of violation unknown. | Sampling techniques were reviewed and related treatment processes were evaluated. |
| Coliform Bacteria 7 Day Average | MPN/100ml | 9/3-9/9/2002 | >2.2 | 2.2 | UV-3000 Reactor chamber needed to be cleaned and operators needed to be re-instructed as to the proper sampling procedure for UV systems. | Re-instructed operators and re-scheduled the cleaning of the UV Reactor chamber to the week prior to Chronic toxicity testing. |
| Discharge of partially treated effluent and turbidity > 10 NTUs | NTU | 2/12/2003 | >10 | 10 | Hydraulic overload from heavy rains and plugged return activated sludge line coming from the south Clarifier. | Adjusted aeration basins effluent valves to reduce flow to clarifiers and filters. Need to expand the Treatment facility to except greater flows during rain events. |
| Discharge of partially treated effluent and turbidity > 10 NTUs | NTU | 2/3/2004 | >10 | 10 | Violation was due to plugged return activated sludge (RAS) lines resulting from tumble weeds and other debris blowing into process tanks. | Wire fence was erected around perimeter of basins to catch flying debris. Reduced flow from basins, by adjustment of pinch valves, minimized effects resulting from these discharges. |
| Discharge of partially treated effluent and turbidity > 10 NTUs | NTU | 4/25/2004 | >10 | 10 | Violation was due to plugged return activated sludge (RAS) lines resulting from tumble weeds and other debris blowing into process tanks. | Wire fence was erected around perimeter of basins to catch flying debris. Reduced flow from basins, by adjustment of pinch valves, minimized effects resulting from these discharges. |
| Stream dissolved oxygen | mg/L | 7/15-7/23/2004 | <5 | >5 | Violation occurred as a result of an interruption of electrical power to the sludge handling systems due to construction. | Additional air was introduced to the basins in order to handle the increased solids loading. |
| Average Turbidity in 24 hour period | NTU | 8/20-9/2/2004 | >2 | 2 | Aeration basins plugged with construction debris, thus plugging the sand filters. | Restored system by pumping to new aeration basins and cleaning the filters. |
| Coliform Bacteria | MPN/100ml | 9/1-9/14/2004 | 300 | 23 | Investigation by plant staff found that coliform violations were the result of defective UV lamps and improper sampling techniques. | The UV system lamps were replaced and operators were briefed on proper coliform sampling procedures. |
| Stream dissolved oxygen | mg/L | 9/17-9/24/2004 | <5 | >5 | Violation occurred as a result of an interruption of electrical power to the sludge handling systems due to construction. | Additional air was introduced to the basins in order to handle the increased solids loading. |
| Coliform Bacteria | MPN/100ml | 12/16/2004 | 240 | 23 | Investigation by plant staff found that coliform violations were the result of defective UV lamps and improper sampling techniques. | The UV system lamps were replaced and operators were briefed on proper coliform sampling procedures. |
| Coliform Bacteria | MPN/100ml | 1/8/2005 | 130 | 23 | Investigation by plant staff found no explanation for violation. | UV system lamps were cleaned as a precaution. |

| Parameter | Unit | Date | Value | Permit Limit | Reason for Violation | Corrective Measures |
|-------------------------|------|--------|-------|--------------|--|---|
| Average monthly ammonia | mg/L | Jan-05 | 7.3 | 5 | Investigation by plant staff found no explanation for violation. | UV system lamps were cleaned as a precaution. |

E. Planned Changes:

The discharger is proposing to increase wastewater treatment plant capacity from 2 mgd to 4.0 mgd. The discharger is working with Beaumont-Cherry Valley Water District (BCVWD) to design and construct a recycled water pump station and a transmission system to deliver a limited volume of recycled water for irrigation of landscaping and golf courses. The discharger and BCVWD are considering design and construction of recycled water storage facilities. Implementation of the recycled water system will result in changes in the volume and frequency of surface water discharges (see I.B and II.B., above)

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

1. A revised Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan specifies beneficial uses and water quality objectives for waters in the Santa Ana Region. On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed “management zones”, new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground

waters. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. The surface water components of the N/TDS Amendment are awaiting EPA approval. This Order implements those surface water provisions, which, for the City of Beaumont, are as or more stringent than those in the Basin Plan. The groundwater-related components of the N/TDS Amendment became effective upon approval by OAL. Accordingly, these waste discharge requirements also implement relevant, groundwater-related components of the N/TDS Amendment.

Tertiary treated wastewater from the treatment plant is discharged to Cooper's Creek, a tributary of San Timoteo Creek, Reach 3. San Timoteo Creek is tributary to the Santa Ana River, Reach 5. The Santa Ana River, Reach 5 is tributary to the Santa Ana River, Reach 4, thence Reach 3 and downstream reaches. The beneficial uses of receiving waters affected by the discharge from the Facility are tabulated as follows:

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|-----------------|--|---|
| M-001 | Copper's Creek and San Timoteo Creek, Reach 3 ² | a. Wildlife habitat, b. Warm freshwater habitat, c. Groundwater recharge, d. Water contact recreation, and e. Non-contact water recreation. |
| | Santa Ana River, Reach 5 ³ | a. Agricultural supply, b. Groundwater recharge, c. Water contact recreation, d. Non-contact water recreation, e. Warm freshwater habitat, f. Wildlife habitat, and g. Rare, threatened, or endangered species. |
| | San Timoteo Groundwater Management Zone | a. Municipal and domestic supply, b. Agricultural Supply, c. Industrial process supply, and d. Industrial service supply |
| M-002 | Beaumont Groundwater Management Zone | a. Municipal and domestic supply, b. Agricultural Supply, c. Industrial process supply, and d. Industrial service supply |

² Excepted from municipal and domestic supply (MUN)

³ Excepted from municipal and domestic supply downstream of Orange Avenue (Redlands)

2. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
3. State Implementation Policy. On March 2, 2000, State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so.
4. Antidegradation Policy. Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. The permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16.
5. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR §122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Order.
6. Monitoring and Reporting Requirements. Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

7. Pretreatment: The expanded treatment plant capacity is only 4 mgd and there are no significant industrial users within the service areas. Consequently, this Order does not contain requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act; Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403); and/or Section 2233, Title 23, California Code of Regulations.
8. Biosolids: On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the U.S. Environmental Protection Agency is the implementing agency.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established. Three options exist to protect water quality: 1) 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

A. Discharge Prohibitions

Discharge Prohibitions in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, and U.S. Environmental Protection Agency guidance and regulations.

B. Technology-Based Effluent Limitations

1. Scope and Authority

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR §125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR §125.3.

2. Applicable Technology-Based Effluent Limitations

Basis for Limitations

| Constituents | Basis for Limitations |
|---------------------------------|---|
| Biochemical Oxygen Demand (BOD) | Discharges to waters that support aquatic life, that is dependent on oxygen. Organic matter in the discharge may consume oxygen as it breaks down. |
| Total Suspended Solids (TSS) | High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids. |
| Hydrogen Ion (pH) | Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A range specified between 6.5 to 8.5 ensures suitability of biological life. This limitation has been adopted in the Basin Plan of the Santa Ana Region. |
| Total Dissolved Solids | High levels of TDS can adversely impact aquatic life. The TDS limit is based on evaluation of plant performance data and consistent with the Basin Plan. |
| Flow | The proposed design capacity of the treatment plant is 4.0 MGD. |

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

- a. Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Water Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States.
- b. The U.S. Environmental Protection Agency published the adopted California Toxics Rule (CTR) (40 CFR §131.38). The CTR promulgates new criteria for both human health protection and protection of aquatic life. New numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants are listed. In addition, the CTR contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.

2. Applicable Water Quality Criteria and Objectives

Table, below summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

| CTR No. | Parameter | Water Quality Criteria | | | |
|---------|-----------|------------------------|---------|----------------------------------|----------------|
| | | Freshwater | | Human Health for Consumption of: | |
| | | Acute | Chronic | Water & Organisms | Organisms only |
| | | µg/L | µg/L | µg/L | µg/L |
| 1 | Selenium | | 5 | | |

3. Determining the need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA

considers criteria from the CTR, and when applicable, water quality objectives specified in the Basin Plan.

Sufficient data are needed to conduct a complete RPA. If data are not sufficient, the discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants for which effluent data were available. These data were used in the RPA and are summarized in the following Table:

Permit limit implementing California Toxics Rule for freshwater discharges

Hardness Dependent Trace Metals to determine CMC and CCC, then to put into MEC table form comparison

| Hardness Dependent Trace Metals to determine CMC and CCC, then to put into MDC table for comparison | | | | | | | | | | | | | |
|---|--|----------------|----------------|----------------|-----------------|-----------------|-----------|---|-----------|---------------------------------------|-------|-------------------|--|
| Effluent Hardness = | | 170 | | LN Hardness = | | 5.136 | | | | | | | |
| California Toxics Rule | | | | | | | Dissolved | | | | | Total Recoverable | |
| Metal | m _A | b _A | m _C | b _C | CF _A | CF _C | CMC | CCC | T/D Ratio | WER | Acute | Chronic | |
| Antimony | No Published Aquatic Criterion Value | | | | | (b) | (b) | | | No CMC, CCC use Human Health Criteria | | | |
| Arsenic | | | | | 1.000 | 1.000 | 340 | 150 | 1.0 | 1.0 | 340 | 150 | |
| Beryllium | No Published Aquatic Criterion Value | | | | | (b) | (b) | | | No CMC, CCC or Human Health Criteria | | | |
| Cadmium | 1.128 | -3.6867 | 0.7852 | -2.715 | 0.922 | 0.887 | 7.58 | 3.31 | 2.60 | 1.00 | 19.70 | 8.61 | |
| Chromium (III) | 0.819 | 3.688 | 0.819 | 1.561 | 0.316 | 0.860 | 847.4 | 274.9 | 1.0 | 1.0 | 2682 | 320 | |
| Chromium (VI) | --- | --- | --- | --- | 0.982 | 0.962 | 16.0 | 11.0 | 1/Cfa | 1/CFc | 16.3 | 11.4 | |
| Copper | 0.9422 | -1.7 | 0.8545 | -1.702 | 0.960 | 0.960 | 22.2 | 14.1 | 2.6 | 1.0 | 57.6 | 36.6 | |
| Cyanide | | | | | | | | | | | 22.0 | 5.2 | |
| Lead | 1.273 | -1.46 | 1.273 | -4.705 | 0.714 | 0.714 | 114.5 | 4.5 | 6.1 | 1.0 | 698 | 27 | |
| Mercury | No CMC or CCC use Human Health Criteria for organisms only | | | | | | | 0.051 | 1/Cfa | 1/CFc | | 0.051 | |
| Nickel | 0.846 | 2.255 | 0.846 | 0.0584 | 0.998 | 0.997 | 734 | 81 | 1.0 | 1.0 | 735 | 82 | |
| Selenium | --- | --- | --- | --- | (a) | (a) | | 5.0 | | | | 5.0 | |
| Silver | 1.72 | -6.52 | --- | --- | 0.850 | (b) | 8.6 | --- | 1/Cfa | 1.0 | 10.1 | --- | |
| Thallium | --- | --- | --- | --- | (b) | (b) | --- | No CMC or CCC use Human Health Criteria | | | | | |
| Zinc | 0.8473 | 0.884 | 0.8473 | 0.884 | 0.978 | 0.986 | 184 | 185 | 1.0 | 1.0 | 188 | 188 | |

(a) Bioaccumulative compound and inappropriate to adjust to percent dissolved

(b) EPA has not published an aquatic life criterion value

unit: ug/l

Equation used :

$CMC = (exp\{m_A \ln(hardness)\} + b_A)$

Acute Value = CMC x WER x Acute Conversion Value (CFA) x T/D Ratio (1/CFA)

$CCC = (exp\{m_C \ln(hardness)\} + b_C)$

Chronic Value = CCC x xWER x Chronic Conversion Factor (CFC) x T/D Ratio (or 1/CFC)

Notes:

1. The water effect ratio being used is 1

2. The site specific total to dissolved ratio for cadmium, copper and lead are as follows:

a. Cadmium 2.6 :1

b. Copper 2.6:1

c. Lead 6.1:1

3. For those metals without site specific t/d ratio developed, the total to dissolved ratio for these metals is either 1/CFA for CMC or 1/CFC for CCC

4. No mixing zone and dilution considered in the calculation.

5. Permit limit calculations is based on the procedures stipulated in the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries.

6. Effluent hardness is calculated median of effluent data.

PERMIT LIMIT CALCULATION AND DETERMINATION OF THE MOST APPROPRIATE ML VALUE CONSIDERING CV

unit in ug/l

| | Caltoxics | | | | CV = 0.6 | | LTA | Aquatic | | Permit Limit | |
|-------------|------------|-------|--------------|----------|-----------|-------------|-------------|------------------|------|---------------------|-------------|
| | | | | | Acute M | Chronic M | | Objective/limits | | Concentration Limit | |
| | Freshwater | | Human Health | | 0.321 | 0.527 | | 3.11 | 1.55 | | |
| Constituent | CMC | CCC | H2O+Org | Org only | Acute LTA | Chronic LTA | | MDEL | AMEL | MDEL | AMEL |
| Selenium | | 5.000 | | | 0.00 | 2.64 | 2.64 | 8.19 | 4.08 | 8.19 | 4.08 |

Comments: Reviewing RDLs of emwd indicated that some RDLs are greater than MLs recommended by SWRCB, especially for VOCs.

4. WQBEL Calculations

- a. Water quality based effluent limits (final) are based on monitoring results and following the calculation process outlined in Section 1.4 of the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California. The final WQBELs were calculated for this Order using the process described below.
- b. WQBELS Calculation Example

Using selenium as an example, the following methodology demonstrates how water quality based effluent limits were established for this Order. The process for developing these limits is in accordance with Section 1.4 of the SIP.

Step 1:

For selenium the applicable freshwater water quality criteria is:

$ECA_{chronic} = 5.00 \mu g/l$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$LTA_{acute} = ECA_{acute} \times Multiplier_{acute}$

$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic}$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For selenium, the following data was used to develop the acute and chronic LTA using Table 1 of the SIP:

| No. of Samples | CV | Multiplier _{acute} | Multiplier _{chronic} |
|----------------|-----|-----------------------------|-------------------------------|
| 16 | 0.6 | 0.321 | 0.527 |

$$LTA_{\text{chronic}} = 5.00 \mu\text{g/l} \times 0.527 = 2.64 \mu\text{g/l}$$

Step 3: Select the most limiting (lowest) of the LTA.

$LTA = \text{most limiting of } LTA_{\text{acute}} \text{ or } LTA_{\text{chronic}}$

For selenium, the most limiting LTA was the LTA_{acute}

$$LTA = 2.64 \mu\text{g/l}$$

Step 4: Calculate the water quality based effluent limits by multiplying the LTA by a factor (multiplier). Water quality-based effluent limits are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{\text{aquatic life}} = LTA \times AMEL_{\text{multiplier}}$$

$$MDEL_{\text{aquatic life}} = LTA \times MDEL_{\text{multiplier}}$$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For selenium, the following data was used to develop the AMEL and MDEL for aquatic life using Table 2 of the SIP:

| No. of Samples | CV | MultiplierMDEL | MultiplierAMEL |
|----------------|-----|----------------|----------------|
| 16 | 0.6 | 3.11 | 1.55 |

$$\text{AMELaquatic life} = 2.64 \times 1.55 = 4.08 \mu\text{g/l}$$

$$\text{MDELaquatic life} = 2.64 \times 3.11 = 8.21 \mu\text{g/l}$$

D. Final Effluent Limitations

Final effluent limitations required by this Order are shown in Section I?1V, Effluent Limitations and Discharge Specifications of the Order.

Proposed effluent limitations are based on tertiary treatment standards.

1. Mass-based Effluent Limitations

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)

where: Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limit for a pollutant (mg/L)

Flow rate = discharge flow rate (MGD)

This Order includes limitations for TDS and TIN that are based on the wasteload allocations specified in the Basin Plan, as amended by the N/TDS Amendment. Two different wasteload allocations are specified for each of these constituents: the wasteload allocations that apply provided that maximum benefit is demonstrated and maximum benefit objectives thus apply to the affected groundwaters (see discussion in F. Land Discharge Specifications, below); the “antidegradation” wasteload allocations that apply if maximum benefit is not demonstrated and the “antidegradation” groundwater objectives thus apply. To implement these wasteload allocations, two sets of effluent limits for TDS and TIN are specified in this Order. One set applies if maximum benefit is demonstrated; the other set applies if maximum benefit is not demonstrated.

E. Interim Effluent Limitations (Not Applicable)

F. Land Discharge Specifications

As shown in Chapter 4 of the Basin Plan as amended by the N/TDS Amendment, two sets of TDS and nitrate-nitrogen objectives have been adopted for both the San Timoteo and Beaumont Groundwater Management Zones (GMZ): the “maximum benefit” objectives and more stringent objectives based on historic ambient quality (the “antidegradation” objectives). The application of the “maximum benefit” objectives for these Management Zones is contingent on the implementation of commitments by the City of Beaumont and the San Timoteo Watershed Management Authority (STWMA) (and, in the case of the San Timoteo Management Zone, by the Yucaipa Valley Water District (YVWD)) to implement specific water and wastewater resources management programs. These programs are delineated in Chapter 5 of the Basin Plan, as amended by the N/TDS Amendment and include compliance dates for the implementation of specific

activities. These programs are part of a coordinated effort by the member agencies (the City of Beaumont, the Beaumont-Cherry Valley Water District and the South Mesa Water Company) of STWMA to develop and implement projects that will assure reliable water supplies to meet rapidly increasing demands in this area. The San Timoteo Watershed Management Program (STWMP) developed by STWMA entails enhanced recharge of native and recycled water, maximizing the direct use of recycled water, optimizing the direct use of imported water, recharge and conjunctive use.

This Order implements relevant portions of the N/TDS Amendment by specifying effluent limitations and other requirements that pertain to both the “maximum benefit” and “antidegradation” management zones/water quality objectives. Provided that the maximum benefit commitments shown in the N/TDS Amendment are satisfied, then the requirements of the Order that address the “maximum benefit” objectives for the San Timoteo and Beaumont GMZ apply. If the Regional Board finds that the maximum benefit commitments are not being met, then the requirements of the Order that addresses the “antidegradation” TDS and nitrate-nitrogen objectives for these GMZ apply. Although the maximum benefit commitments for the Beaumont and San Timoteo GMZ were made jointly by both the City of Beaumont and STWMA, this Order recognizes the City of Beaumont as the responsible party to mitigate the effects of TDS and TIN discharges recharge that took place in excess of the limits based on the “antidegradation” objectives if the Regional Board makes the finding that maximum benefit is not demonstrated. Again, for the San Timoteo GMZ, the finding of maximum benefit is contingent on the implementation of maximum benefit commitments by both the City of Beaumont (and STWMA) and the Yucaipa Valley Water District.

G. Reclamation Specifications

Section 13523 of the California Water Code provides that a Regional Water Board, after consulting with and receiving the recommendations from the CDHS and any party who has requested in writing to be consulted, and after any necessary hearing, shall prescribe water reclamation requirements for water which is used or proposed to be used as recycled water, if, in the judgment of the Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the CDHS pursuant to California Water Code Section 13521.

Reclamation specifications in the proposed Order are based upon the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, “Guidelines for Use of Reclaimed Water” by the California Department of Health Services, and Pursuant to the California Water Code Section 13521.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

1. The surface water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan. As such, they are required part of the proposed Order.

The proposed TDS limit (490 mg/l) for direct discharges into Cooper's Creek is based on the maximum benefit waste load allocation specified in Table 5-5 of the Basin Plan, as amended by the N/TDS Amendment. The Order also includes a TDS limit based on the quality of the water supplied to the service area plus a reasonable use increment. The more restrictive of the two TDS limits applies to the discharges. The proposed TDS limit is more restrictive than the waste load allocation for the discharge that was specified in the 1995 Basin Plan (540 mg/l). However, the discharger has demonstrated that compliance with the more restrictive limit is achievable.

This Order also includes TDS limits based on the antidegradation wasteload allocation in Table 5-5 of the Basin Plan, as amended by the N/TDS amendment. This TDS limit will become effective if maximum benefit is not being demonstrated (see preceding discussion in IV. D. Final Effluent Limitations and IV. F. Land Discharge Specifications) If maximum benefit is not demonstrated, this Order requires the discharger to mitigate TDS in excess of the anti-degradation TDS objectives.

This Order also includes two sets of TIN limits: one limit is based on the maximum benefit wasteload allocation specified in Table 5-5 of the Basin Plan, as amended by the N/TDS Amendment; the other limit is based on the antidegradation wasteload allocation also specified in Table 5-5. The TIN limit based on the maximum benefit wasteload allocation is effective provided that maximum benefit is demonstrated. If maximum benefit is not demonstrated, then the limit based on the antidegradation wasteload allocation applies.

2. Requirement to meet 2.2 total coliform bacteria limit in the effluent:
 - a. Article 3, Section 60305 of Title 22, Chapter 3, "Reclamation Criteria" of the California Code of Regulations specifies that recycled water used as a source supply for nonrestricted recreational impoundments shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated). The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California Department of Health Services (CDHS) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation.

- b. The CDHS has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", Department of Health Services, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of recycled water to nonrestricted recreational impoundments, since the public health risks under both scenarios are analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.
- c. The Santa Ana River, and Cooper's/San Timoteo Creeks, are not "nonrestricted recreational impoundments," nor is "recycled water", as defined in the Reclamation Criteria, being used as a supply source for the River or Creeks. However, except during major storms, most of the flow in the River and Creeks is composed of treated municipal wastewater discharges. The River and Creeks are used for water contact recreation and, accordingly, are designated REC-1 (water contact beneficial use). People recreating in the River or Creeks face an exposure similar to those coming in contact with recycled water in an impoundment. Therefore, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to the River and Creeks as would be required for the use of recycled water in a nonrestricted recreational impoundment.

B. Groundwater

Discharges from the Facility to Cooper's Creek and thence San Timoteo Creek, Reach 3 affect the San Timoteo Groundwater Management Zone. Currently expected recycled water use in the Discharger's service area will affect the Beaumont Groundwater Management Zone. For recycled water use, this Order specifies TDS and TIN limits based on the maximum benefit water quality objectives for the Beaumont GMZ. The Order also includes TDS and TIN limits based on the antidegradation water quality objectives for the Beaumont GMZ. The limits based on the antidegradation objectives will become effective if maximum benefit is not demonstrated.

Selenium and pH limits for recycled water use are based on the Basin Plan water quality objectives.

BOD and TSS limits for recycled water use are based on secondary treatment standards.

Total Coliform bacteria and turbidity limits are based on Title 22 regulations for the use of recycled water.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the California Water Code authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements without change.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed monitoring and reporting program (Attachment E). This provision requires compliance with the monitoring and reporting program, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The SMP is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The monitoring and reporting program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

C. Whole Effluent Toxicity Testing

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a shorter time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, this Order requires the Discharger to conduct chronic toxicity testing. In addition, the Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity identification evaluation (TIE) studies.

This Order requires the discharger to conduct chronic toxicity testing of the effluent on a monthly basis. The Order also requires the discharger to conduct an Initial Investigation Toxicity Reduction Evaluation (IITRE) program when either the two-month median of toxicity test results exceeds 1 TUc or any single test exceeds 1.7 TUc for survival endpoint. Based on the results of this investigation program and at the discretion of the Executive Officer, a more rigorous Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) may be required. A re-opener provision is included in the Order to incorporate a chronic toxicity effluent limitation if warranted by the toxicity test results.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan.

2. Groundwater

The Discharger is required to submit a program for conducting groundwater monitoring at recycled water use sites for three years. Monitoring results of this groundwater-monitoring program will be used to develop groundwater quality objectives for total dissolved solids and total inorganic nitrogen for the Bedford Groundwater Management Zone.

E. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger will be required to collect a sample of each source of water supplied and analyze for total dissolved solids. The result of this monitoring will to show compliance with TDS limitations in the Order.

2. Biosolids/Sludge Monitoring

To track where, how much and what quality of biosolids is disposed, the Order requires the Discharger to maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and to provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the Monitoring and Reporting Program of this Order. The sludge that is stockpiled at the treatment facility will be sampled and analyzed for those constituents listed in the sludge monitoring section of the Monitoring and Reporting Program of this Order.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

B. Special Provisions

Maximum Benefit Provisions

These provisions are based on the Basin Plan, as amended by the N/TDS amendment. Chapter 5, Section VI of the amended Basin Plan specifies “Maximum Benefit Implementation Plans for Salt Management”, including plans for the Yucaipa Valley Water District that apply to the Yucaipa and San Timoteo Groundwater Management Zones, and for the City of Beaumont/San Timoteo Watershed Management Authority that apply to the San Timoteo and Beaumont Groundwater Management Zones. The plans specify tasks and projects, with schedules, that the responsible parties have committed to implement. Provided that these commitments are met, then maximum benefit groundwater objectives and wasteload allocations for TDS and TIN apply and are used as the basis for establishing effluent limitations. If the commitments are not met, then antidegradation groundwater objectives and wasteload allocations for TDS and TIN apply and are the basis of effluent limitations. The maximum benefit and antidegradation

objectives and wasteload allocations are specified in Chapter 4 (Table 4-1) and Chapter 5 (Table 5-5) of the amended Basin Plan, respectively.

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. Toxicity Identification Evaluations or Toxicity Reduction Evaluations. This provision is based on the SIP, Section 4, Toxicity Control Provisions.
- b. Antidegradation Analysis. This provision is based on State Water Resources Control Board Resolution No. 68-16, which requires the Board in regulating the discharge of waste to maintain high quality waters of the state (the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained.

3. Best Management Practices and Pollution Prevention (Not Applicable)

4. Compliance Schedules (Not Applicable)

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. Sludge Disposal Requirements. Requirements are based on the previous Order.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the City of Beaumont's Wastewater Treatment Plant No. 1. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through: posting of the Notice of Public Hearing at the City Hall and publication of the Notice in the local newspaper; and, posting the Notice and draft Order on the Regional Water Board website: <http://www.waterboards.ca.gov/santaana> on August 31, 2005.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on September 12, 2005

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 30, 2005
Time: 9:00 a.m.
Location: Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.waterboards.ca.gov/santaana where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-4130.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to J. Shami at (951) 782-3288.

ATTACHMENT G – MINIMUM LEVELS

MINIMUM LEVELS IN PPB (µg/l)

| Table 1 - VOLATILE SUBSTANCES ¹ | GC | GCMS |
|---|-----|------|
| Acrolein | 2.0 | 5 |
| Acrylonitrile | 2.0 | 2 |
| Benzene | 0.5 | 2 |
| Bromoform | 0.5 | 2 |
| Carbon Tetrachloride | 0.5 | 2 |
| Chlorobenzene | 0.5 | 2 |
| Chlorodibromomethane | 0.5 | 2 |
| Chloroethane | 0.5 | 2 |
| Chloroform | 0.5 | 2 |
| Dichlorobromomethane | 0.5 | 2 |
| 1,1 Dichloroethane | 0.5 | 1 |
| 1,2 Dichloroethane | 0.5 | 2 |
| 1,1 Dichloroethylene | 0.5 | 2 |
| 1,2 Dichloropropane | 0.5 | 1 |
| 1,3 Dichloropropylene (volatile) | 0.5 | 2 |
| Ethylbenzene | 0.5 | 2 |
| Methyl Bromide (<i>Bromomethane</i>) | 1.0 | 2 |
| Methyl Chloride (<i>Chloromethane</i>) | 0.5 | 2 |
| Methylene Chloride (<i>Dichloromethane</i>) | 0.5 | 2 |
| 1,1,2,2 Tetrachloroethane | 0.5 | 1 |
| Tetrachloroethylene | 0.5 | 2 |
| Toluene | 0.5 | 2 |
| trans-1,2 Dichloroethylene | 0.5 | 1 |
| 1,1,1 Trichloroethane | 0.5 | 2 |
| 1,1,2 Trichloroethane | 0.5 | 2 |
| Trichloroethylene | 0.5 | 2 |
| Vinyl Chloride | 0.5 | 2 |
| 1,2 Dichlorobenzene (volatile) | 0.5 | 2 |
| 1,3 Dichlorobenzene (volatile) | 0.5 | 2 |
| 1,4 Dichlorobenzene (volatile) | 0.5 | 2 |

SELECTION AND USE OF APPROPRIATE ML VALUE:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed herein that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in this Attachment “A”.

ML Usage: The ML value listed herein represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

Note: chemical names in parenthesis and italicized is another name for the constituent.

¹ The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

MINIMUM LEVELS IN PPB (µg/l)

| Table 2 – Semi-Volatile Substances ² | GC | GCMS | LC |
|---|----|------|------|
| 2-Chloroethyl vinyl ether | 1 | 1 | |
| 2 Chlorophenol | 2 | 5 | |
| 2,4 Dichlorophenol | 1 | 5 | |
| 2,4 Dimethylphenol | 1 | 2 | |
| 4,6 Dinitro-2-methylphenol | 10 | 5 | |
| 2,4 Dinitrophenol | 5 | 5 | |
| 2- Nitrophenol | | 10 | |
| 4- Nitrophenol | 5 | 10 | |
| 4 Chloro-3-methylphenol | 5 | 1 | |
| 2,4,6 Trichlorophenol | 10 | 10 | |
| Acenaphthene | 1 | 1 | 0.5 |
| Acenaphthylene | | 10 | 0.2 |
| Anthracene | | 10 | 2 |
| Benzidine | | 5 | |
| Benzo (a) Anthracene (1,2 Benzanthracene) | 10 | 5 | |
| Benzo(a) pyrene (3,4 Benzopyrene) | | 10 | 2 |
| Benzo (b) Flouranthene (3,4 Benzofluoranthene) | | 10 | 10 |
| Benzo(g,h,i)perylene | | 5 | 0.1 |
| Benzo(k)fluoranthene | | 10 | 2 |
| bis 2-(1-Chloroethoxyl) methane | | 5 | |
| bis(2-chloroethyl) ether | 10 | 1 | |
| bis(2-Chloroisopropyl) ether | 10 | 2 | |
| bis(2-Ethylhexyl) phthalate | 10 | 5 | |
| 4-Bromophenyl phenyl ether | 10 | 5 | |
| Butyl benzyl phthalate | 10 | 10 | |
| 2-Chloronaphthalene | | 10 | |
| 4-Chlorophenyl phenyl ether | | 5 | |
| Chrysene | | 10 | 5 |
| Dibenzo(a,h)-anthracene | | 10 | 0.1 |
| 1,2 Dichlorobenzene (semivolatile) | 2 | 2 | |
| 1,3 Dichlorobenzene (semivolatile) | 2 | 1 | |
| 1,4 Dichlorobenzene (semivolatile) | 2 | 1 | |
| 3,3' Dichlorobenzidine | | 5 | |
| Diethyl phthalate | 10 | 2 | |
| Dimethyl phthalate | 10 | 2 | |
| di-n-Butyl phthalate | | 10 | |
| 2,4 Dinitrotoluene | 10 | 5 | |
| 2,6 Dinitrotoluene | | 5 | |
| di-n-Octyl phthalate | | 10 | |
| 1,2 Diphenylhydrazine | | 1 | |
| Fluoranthene | 10 | 1 | 0.05 |
| Fluorene | | 10 | 0.1 |
| Hexachloro-cyclopentadiene | 5 | 5 | |
| 1,2,4 Trichlorobenzene | 1 | 5 | |

MINIMUM LEVELS IN PPB (µg/l)

| Table 2 - SEMI-VOLATILE SUBSTANCES ² | GC | GCMS | LC | COLOR |
|---|----|------|------|-------|
| Pentachlorophenol | 1 | 5 | | |
| Phenol ³ | 1 | 1 | | 50 |
| Hexachlorobenzene | 5 | 1 | | |
| Hexachlorobutadiene | 5 | 1 | | |
| Hexachloroethane | 5 | 1 | | |
| Indeno(1,2,3,cd)-pyrene | | 10 | 0.05 | |
| Isophorone | 10 | 1 | | |
| Naphthalene | 10 | 1 | 0.2 | |
| Nitrobenzene | 10 | 1 | | |
| N-Nitroso-dimethyl amine | 10 | 5 | | |
| N-Nitroso -di n-propyl amine | 10 | 5 | | |
| N-Nitroso diphenyl amine | 10 | 1 | | |
| Phenanthrene | | 5 | 0.05 | |
| Pyrene | | 10 | 0.05 | |

| Table 3 – INORGANICS ⁴ | FAA | GFAA | ICP | ICPM S | SPGF AA | HYDRID E | CVA A | COLO R | DCP |
|-----------------------------------|-----|------|-----|--------|---------|----------|-------|--------|-------|
| Antimony | 10 | 5 | 50 | 0.5 | 5 | 0.5 | | | 1000 |
| Arsenic | | 2 | 10 | 2 | 2 | 1 | | 20 | 1000 |
| Beryllium | 20 | 0.5 | 2 | 0.5 | 1 | | | | 1000 |
| Cadmium | 10 | 0.5 | 10 | 0.25 | 0.5 | | | | 1000 |
| Chromium (total) | 50 | 2 | 10 | 0.5 | 1 | | | | 1000 |
| Chromium VI | 5 | | | | | | | 10 | |
| Copper | | 5 | 10 | 0.5 | 2 | | | | |
| Lead | 20 | 5 | 5 | 0.5 | 2 | | | | 10000 |
| Mercury | | | | 0.5 | | | 0.2 | | |
| Nickel | 50 | 5 | 20 | 1 | 5 | | | | 1000 |
| Selenium | | 5 | | 2 | 5 | 1 | | | |
| Silver | 10 | 1 | 10 | 0.25 | 2 | | | | 1000 |
| Thallium | 10 | 2 | 10 | 1 | 5 | | | | 1000 |
| Zinc | 20 | | 20 | 1 | 10 | | | | 1000 |
| Cyanide | | | | | | | | 5 | |

² With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

³ Phenol by colorimetric technique has a factor of 1

⁴ The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

MINIMUM LEVELS IN PPB (µg/l)

| Table 4 - PESTICIDES – PCBs ⁵ | GC |
|--|-------|
| Aldrin | 0.005 |
| alpha-BHC (<i>a</i> -Hexachloro-cyclohexane) | 0.01 |
| beta-BHC (<i>b</i> -Hexachloro-cyclohexane) | 0.005 |
| Gamma-BHC (<i>Lindane</i> ; <i>g</i> -Hexachloro-cyclohexane) | 0.02 |
| Delta-BHC (<i>d</i> -Hexachloro-cyclohexane) | 0.005 |
| Chlordane | 0.1 |
| 4,4'-DDT | 0.01 |
| 4,4'-DDE | 0.05 |
| 4,4'-DDD | 0.05 |
| Dieldrin | 0.01 |
| Alpha-Endosulfan | 0.02 |
| Beta-Endosulfan | 0.01 |
| Endosulfan Sulfate | 0.05 |
| Endrin | 0.01 |
| Endrin Aldehyde | 0.01 |
| Heptachlor | 0.01 |
| Heptachlor Epoxide | 0.01 |
| PCB 1016 | 0.5 |
| PCB 1221 | 0.5 |
| PCB 1232 | 0.5 |
| PCB 1242 | 0.5 |
| PCB 1248 | 0.5 |
| PCB 1254 | 0.5 |
| PCB 1260 | 0.5 |
| Toxaphene | 0.5 |

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

⁵ The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

ATTACHMENT H – EPA PRIORITY POLLUTANT LIST

| CTR Number | Parameter | CAS Number | Suggested Analytical Methods |
|------------|----------------------------|------------|------------------------------|
| 1 | Antimony | 7440360 | EPA 6020/200.8 |
| 2 | Arsenic | 7440382 | EPA 1632 |
| 3 | Beryllium | 7440417 | EPA 6020/200.8 |
| 4 | Cadmium | 7440439 | EPA 1638/200.8 |
| 5a | Chromium (III) | 16065831 | EPA 6020/200.8 |
| 5a | Chromium (VI) | 18540299 | EPA 7199/1636 |
| 6 | Copper | 7440508 | EPA 6020/200.8 |
| 7 | Lead | 7439921 | EPA 1638 |
| 8 | Mercury | 7439976 | EPA 1669/1631 |
| 9 | Nickel | 7440020 | EPA 6020/200.8 |
| 10 | Selenium | 7782492 | EPA 6020/200.8 |
| 11 | Silver | 7440224 | EPA 6020/200.8 |
| 12 | Thallium | 7440280 | EPA 6020/200.8 |
| 13 | Zinc | 7440666 | EPA 6020/200.8 |
| 14 | Cyanide | 57125 | EPA 9012A |
| 15 | Asbestos | 1332214 | EPA/600/R-93/116(PCM) |
| 16 | 2,3,7,8-TCDD | 1746016 | EPA 8290 (HRGC) MS |
| 17 | Acrolein | 107028 | EPA 8260B |
| 18 | Acrylonitrile | 107131 | EPA 8260B |
| 19 | Benzene | 71432 | EPA 8260B |
| 20 | Bromoform | 75252 | EPA 8260B |
| 21 | Carbon Tetrachloride | 56235 | EPA 8260B |
| 22 | Chlorobenzene | 108907 | EPA 8260B |
| 23 | Chlorodibromomethane | 124481 | EPA 8260B |
| 24 | Chloroethane | 75003 | EPA 8260B |
| 25 | 2-Chloroethylvinyl Ether | 110758 | EPA 8260B |
| 26 | Chloroform | 67663 | EPA 8260B |
| 27 | Dichlorobromomethane | 75274 | EPA 8260B |
| 28 | 1,1-Dichloroethane | 75343 | EPA 8260B |
| 29 | 1,2-Dichloroethane | 107062 | EPA 8260B |
| 30 | 1,1-Dichloroethylene | 75354 | EPA 8260B |
| 31 | 1,2-Dichloropropane | 78875 | EPA 8260B |
| 32 | 1,3-Dichloropropylene | 542756 | EPA 8260B |
| 33 | Ethylbenzene | 100414 | EPA 8260B |
| 34 | Methyl Bromide | 74839 | EPA 8260B |
| 35 | Methyl Chloride | 74873 | EPA 8260B |
| 36 | Methylene Chloride | 75092 | EPA 8260B |
| 37 | 1,1,2,2-Tetrachloroethane | 79345 | EPA 8260B |
| 38 | Tetrachloroethylene | 127184 | EPA 8260B |
| 39 | Toluene | 108883 | EPA 8260B |
| 40 | 1,2-Trans-Dichloroethylene | 156605 | EPA 8260B |

| CTR Number | Parameter | CAS Number | Suggested Analytical Methods |
|------------|-----------------------------|------------|------------------------------|
| 41 | 1,1,1-Trichloroethane | 71556 | EPA 8260B |
| 42 | 1,1,2-Trichloroethane | 79005 | EPA 8260B |
| 43 | Trichloroethylene | 79016 | EPA 8260B |
| 44 | Vinyl Chloride | 75014 | EPA 8260B |
| 45 | 2-Chlorophenol | 95578 | EPA 8270C |
| 46 | 2,4-Dichlorophenol | 120832 | EPA 8270C |
| 47 | 2,4-Dimethylphenol | 105679 | EPA 8270C |
| 48 | 2-Methyl-4,6-Dinitrophenol | 534521 | EPA 8270C |
| 49 | 2,4-Dinitrophenol | 51285 | EPA 8270C |
| 50 | 2-Nitrophenol | 88755 | EPA 8270C |
| 51 | 4-Nitrophenol | 100027 | EPA 8270C |
| 52 | 3-Methyl-4-Chlorophenol | 59507 | EPA 8270C |
| 53 | Pentachlorophenol | 87865 | EPA 8270C |
| 54 | Phenol | 108952 | EPA 8270C |
| 55 | 2,4,6-Trichlorophenol | 88062 | EPA 8270C |
| 56 | Acenaphthene | 83329 | EPA 8270C |
| 57 | Acenaphthylene | 208968 | EPA 8270C |
| 58 | Anthracene | 120127 | EPA 8270C |
| 59 | Benzidine | 92875 | EPA 8270C |
| 60 | Benzo(a)Anthracene | 56553 | EPA 8270C |
| 61 | Benzo(a)Pyrene | 50328 | EPA 8270C |
| 62 | Benzo(b)Fluoranthene | 205992 | EPA 8270C |
| 63 | Benzo(ghi)Perylene | 191242 | EPA 8270C |
| 64 | Benzo(k)Fluoranthene | 207089 | EPA 8270C |
| 65 | Bis(2-Chloroethoxy)Methane | 111911 | EPA 8270C |
| 66 | Bis(2-Chloroethyl)Ether | 111444 | EPA 8270C |
| 67 | Bis(2-Chloroisopropyl)Ether | 108601 | EPA 8270C |
| 68 | Bis(2-Ethylhexyl)Phthalate | 117817 | EPA 8270C |
| 69 | 4-Bromophenyl Phenyl Ether | 101553 | EPA 8270C |
| 70 | Butylbenzyl Phthalate | 85687 | EPA 8270C |
| 71 | 2-Chloronaphthalene | 91587 | EPA 8270C |
| 72 | 4-Chlorophenyl Phenyl Ether | 7005723 | EPA 8270C |
| 73 | Chrysene | 218019 | EPA 8270C |
| 74 | Dibenzo(a,h)Anthracene | 53703 | EPA 8270C |
| 75 | 1,2-Dichlorobenzene | 95501 | EPA 8260B |
| 76 | 1,3-Dichlorobenzene | 541731 | EPA 8260B |
| 77 | 1,4-Dichlorobenzene | 106467 | EPA 8260B |
| 78 | 3,3'-Dichlorobenzidine | 91941 | EPA 8270C |
| 79 | Diethyl Phthalate | 84662 | EPA 8270C |
| 80 | Dimethyl Phthalate | 131113 | EPA 8270C |
| 81 | Di-n-Butyl Phthalate | 84742 | EPA 8270C |
| 82 | 2,4-Dinitrotoluene | 121142 | EPA 8270C |
| 83 | 2,6-Dinitrotoluene | 606202 | EPA 8270C |
| 84 | Di-n-Octyl Phthalate | 117840 | EPA 8270C |
| 85 | 1,2-Diphenylhydrazine | 122667 | EPA 8270C |
| 86 | Fluoranthene | 206440 | EPA 8270C |
| 87 | Fluorene | 86737 | EPA 8270C |

| CTR Number | Parameter | CAS Number | Suggested Analytical Methods |
|------------|---------------------------|------------|------------------------------|
| 88 | Hexachlorobenzene | 118741 | EPA 8260B |
| 89 | Hexachlorobutadiene | 87863 | EPA 8260B |
| 90 | Hexachlorocyclopentadiene | 77474 | EPA 8270C |
| 91 | Hexachloroethane | 67721 | EPA 8260B |
| 92 | Indeno(1,2,3-cd)Pyrene | 193395 | EPA 8270C |
| 93 | Isophorone | 78591 | EPA 8270C |
| 94 | Naphthalene | 91203 | EPA 8260B |
| 95 | Nitrobenzene | 98953 | EPA 8270C |
| 96 | N-Nitrosodimethylamine | 62759 | EPA 8270C |
| 97 | N-Nitrosodi-n-Propylamine | 621647 | EPA 8270C |
| 98 | N-Nitrosodiphenylamine | 86306 | EPA 8270C |
| 99 | Phenanthrene | 85018 | EPA 8270C |
| 100 | Pyrene | 129000 | EPA 8270C |
| 101 | 1,2,4-Trichlorobenzene | 120821 | EPA 8260B |
| 102 | Aldrin | 309002 | EPA 8081A |
| 103 | alpha-BHC | 319846 | EPA 8081A |
| 104 | beta-BHC | 319857 | EPA 8081A |
| 105 | gamma-BHC | 58899 | EPA 8081A |
| 106 | delta-BHC | 319868 | EPA 8081A |
| 107 | Chlordane | 57749 | EPA 8081A |
| 108 | 4,4'-DDT | 50293 | EPA 8081A |
| 109 | 4,4'-DDE | 72559 | EPA 8081A |
| 110 | 4,4'-DDD | 72548 | EPA 8081A |
| 111 | Dieldrin | 60571 | EPA 8081A |
| 112 | alpha-Endosulfan | 959988 | EPA 8081A |
| 113 | beta-Endosulfan | 33213659 | EPA 8081A |
| 114 | Endosulfan Sulfate | 1031078 | EPA 8081A |
| 115 | Endrin | 72208 | EPA 8081A |
| 116 | Endrin Aldehyde | 7421934 | EPA 8081A |
| 117 | Heptachlor | 76448 | EPA 8081A |
| 118 | Heptachlor Epoxide | 1024573 | EPA 8081A |
| 119 | PCB-1016 | 12674112 | EPA 8082 |
| 120 | PCB-1221 | 11104282 | EPA 8082 |
| 121 | PCB-1232 | 11141165 | EPA 8082 |
| 122 | PCB-1242 | 53469219 | EPA 8082 |
| 123 | PCB-1248 | 12672296 | EPA 8082 |
| 124 | PCB-1254 | 11097691 | EPA 8082 |
| 125 | PCB-1260 | 11096825 | EPA 8082 |
| 126 | Toxaphene | 8001352 | EPA 8081A |

ATTACHMENT I – PRACTICAL QUANTITATION LEVELS FOR COMPLIANCE

| PRACTICAL QUANTITATION LEVELS FOR COMPLIANCE DETERMINATION | | |
|--|-------------|-------------------------------|
| Constituent | PQL µg/l | Analysis Method |
| 1 Arsenic | 7.5 | GF/AA |
| 2 Barium | 20.0 | ICP/GFAA |
| 3 Cadmium | 15.0 | ICP |
| 4 Chromium (VI) | 15.0 | ICP |
| 5 Cobalt | 10.0 | GF/AA |
| 6 Copper | 19.0 | GF/ICP |
| 7 Cyanide | 50.0 | 335.2/335.3 |
| 8 Iron | 100.0 | ICP |
| 9 Lead | 26.0 | GF/AA |
| 10 Manganese | 20.0 | ICP |
| 11 Mercury | 0.50 | CV/AA |
| 12 Nickel | 50.0 | ICP |
| 13 Selenium | 2.0 | EPA Method 1638, 1640 or 7742 |
| 14 Silver | 16.0 | ICP |
| 15 Zinc | 20.0 | ICP |
| 16 1,2 - Dichlorobenzene | 5.0 | 601/602/624 |
| 17 1,3 - Dichlorobenzene | 5.0 | 601 |
| 18 1,4 - Dichlorobenzene | 5.0 | 601 |
| 18 2,4 - Dichlorophenol | 10.0 | 604/625 |
| 20 4 - Chloro -3- methylphenol | 10.0 | 604/625 |
| 21 Aldrin | 0.04 | 608 |
| 22 Benzene | 1.0 | 602/624 |
| 23 Chlordane | 0.30 | 608 |
| 24 Chloroform | 5.0 | 601/624 |
| 25 DDT | 0.10 | 608 |
| 26 Dichloromethane | 5.0 | 601/624 |
| 27 Dieldrin | 0.10 | 608 |
| 28 Fluorantene | 10.0 | 610/625 |
| 29 Endosulfan | 0.50 | 608 |
| 30 Endrin | 0.10 | 608 |
| 31 Halomethanes | 5.0 | 601/624 |
| 32 Heptachlor | 0.03 | 608 |
| 33 Heptachlor Epoxide | 0.05 | 608 |
| 34 Hexachlorobenzene | 10.0 | 625 |
| 35 Hexachlorocyclohexane | | |
| Alpha | 0.03 | 608 |
| Beta | 0.03 | 608 |
| Gamma | 0.03 | 608 |
| 36 PAH's | 10.0 | 610/625 |
| 37 PCB | 1.0 | 608 |
| 38 Pentachlorophenol | 10.0 | 604/625 |
| 39 Phenol | 10.0 | 604/625 |
| 40 TCDD Equivalent | 0.05 | 8280 |
| 41 Toluene | 1.0 | 602/625 |
| 42 Toxaphene | 2.0 | 608 |
| 43 Tributyltin | 0.02 | GC |
| 44 2,4,6-Trichlorophenol | 10.0 | 604/625 |

ATTACHMENT J - STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. Implementation Schedule

The storm water pollution prevention plan (SWPPP) shall be updated and implemented in a timely manner, but in no case later than December 1, 2005.

2. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage). To achieve these objectives, dischargers should consider the five phase process for SWPPP development and implementation as shown in Table A, below.

The SWPPP requirements are designed to be sufficiently flexible to meet the various needs of the facility. SWPPP requirements that are not applicable to the facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

3. Planning and Organization

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in the Stormwater monitoring program of Order No. R8-2005-0098. The SWPPP shall clearly identify the storm water pollution prevention related responsibilities, duties, and activities of each team member.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. The discharger shall review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of Order No. R8-2005-0098. The discharger shall identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of Order No. R8-2005-0098. As examples, dischargers whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, the discharger whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

- a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section 6.a.(4)., below, have occurred.
- e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

- a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section 4.e., above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

(1) Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the processes (manufacturing or treatment), cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(2) Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(3) Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

(4) Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges. Include toxic chemicals (listed in 40 Code of Federal Regulations [CFR] Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR, Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spills or leaks do not reoccur. Such list shall be updated as appropriate during the term of Order No. R8-2005-0098.

(5) Non-Storm Water Discharges

The discharger shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions of Order No. R8-2005-0098 are prohibited. (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

(6) Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

- b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B, below. The last column of Table B, "Control Practices", should be completed in accordance with Section 8., below.

7. Assessment of Potential Pollutant Sources

- a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in Section 6., above, to determine:
 - (1) Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - (2) Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. The discharger shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

- b. The discharger shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

The discharger is required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8., below.

8. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 6. and 7., above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

The discharger shall consider the following BMPs for implementation at the facility:

- a. Non-Structural BMPs: Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. The discharger should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section 8.b., below). Below is a list of non-structural BMPs that should be considered:
 - (1) Good Housekeeping: Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.
 - (2) Preventive Maintenance: Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.
 - (3) Spill Response: This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.
 - (4) Material Handling and Storage: This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

- (5) **Employee Training:** This includes training of personnel who are responsible for (a) implementing activities identified in the SWPPP, (b) conducting inspections, sampling, and visual observations, and (c) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.
 - (6) **Waste Handling/Recycling:** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.
 - (7) **Record Keeping and Internal Reporting:** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.
 - (8) **Erosion Control and Site Stabilization:** This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.
 - (9) **Inspections:** This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.
 - (10) **Quality Assurance:** This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.
- b. **Structural BMPs:** Where non-structural BMPs as identified in Section 8.a., above, are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:
- (1) **Overhead Coverage:** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.
 - (2) **Retention Ponds:** This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.
 - (3) **Control Devices:** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.
 - (4) **Secondary Containment Structures:** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

- (5) Treatment: This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

9. Annual Comprehensive Site Compliance Evaluation

The discharger shall conduct one comprehensive site compliance evaluation in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- a. A review of all visual observation records, inspection records, and sampling and analysis results.
- b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- d. An evaluation report that includes, (1) identification of personnel performing the evaluation, (2) the date(s) of the evaluation, (3) necessary SWPPP revisions, (4) schedule, as required in Section 10.e, below, for implementing SWPPP revisions, (5) any incidents of non-compliance and the corrective actions taken, and (6) a certification that the discharger is in compliance with Order No. R8-2005-0098. If the above certification cannot be provided, explain in the evaluation report why the discharger is not in compliance with this order. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified.

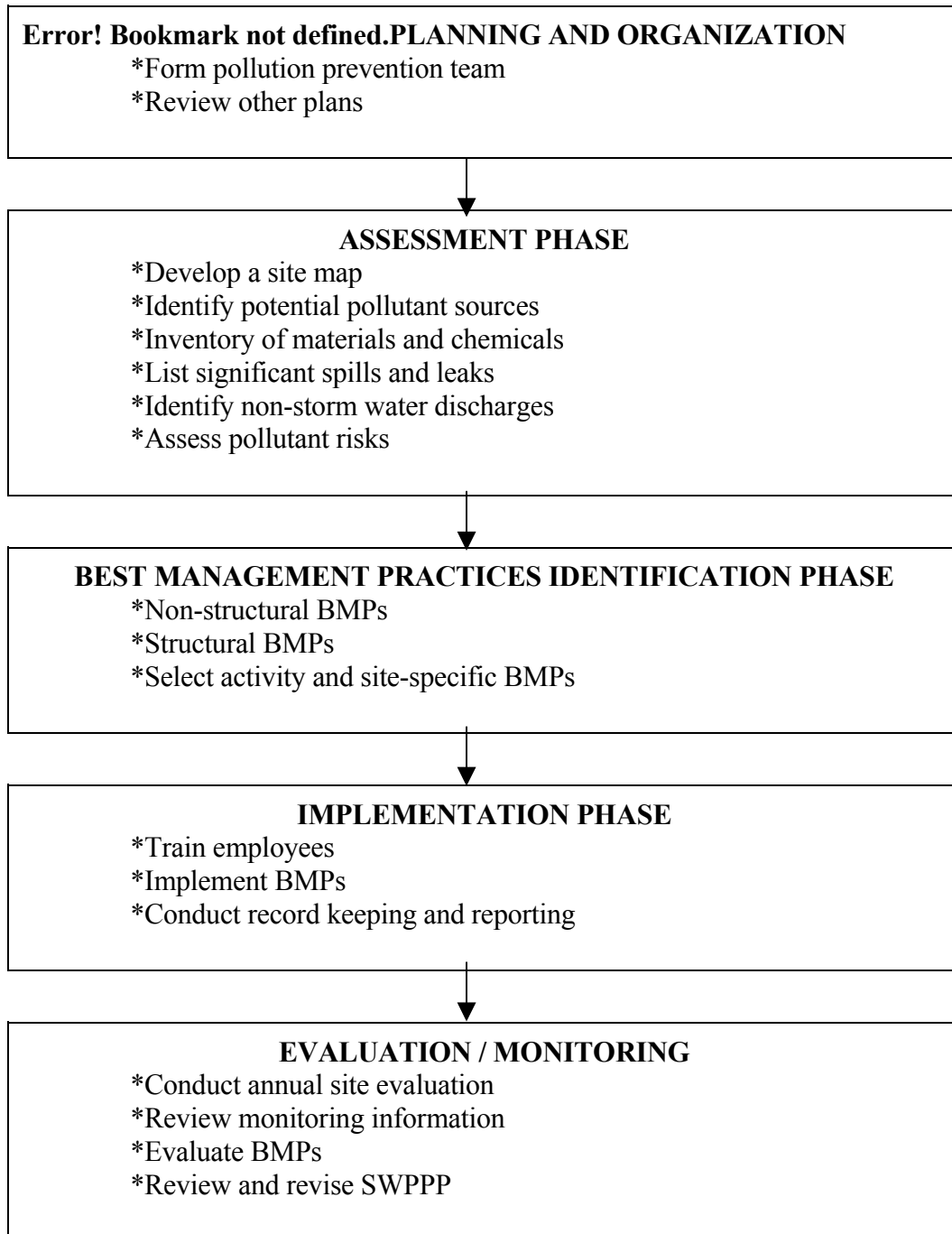
10. SWPPP General Requirements

- a. The SWPPP shall be retained on site and made available upon request by a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- b. The Regional Water Board and/or local agency may notify the discharger when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the discharger shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the discharger shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

- c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (1) may significantly increase the quantities of pollutants in storm water discharge, (2) cause a new area of industrial activity at the facility to be exposed to storm water, or (3) begin an industrial activity which would introduce a new pollutant source at the facility.
- d. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a discharger determines that the SWPPP is in violation of any requirement(s) of Order No. R8-2005-0098.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Order No. R8-2005-0098, due to proposed significant structural changes, the discharger shall submit a report to the Regional Water Board prior to the applicable deadline that (1) describes the portion of the SWPPP that is infeasible to implement by the deadline, (2) provides justification for a time extension, (3) provides a schedule for completing and implementing that portion of the SWPPP, and (4) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. The discharger shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

TABLE A

**FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL
STORM WATER POLLUTION PREVENTION PLANS**



| TABLE B EXAMPLE ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES SUMMARY | | | | |
|--|----------|--|-----------|--|
| AREA | ACTIVITY | POLLUTANT SOURCE | POLLUTANT | BEST MANAGEMENT PRACTICES |
| Vehicle & equipment fueling | Fueling | Spills and leaks during delivery | Fuel oil | <ul style="list-style-type: none"> - Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area - Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program - Implement adequate preventative maintenance program to prevent tank and line leaks - Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques. |
| | | Spills caused by topping off fuel oil | Fuel oil | |
| | | Hosing or washing down fuel area | Fuel oil | |
| | | Leaking storage tanks | Fuel oil | |
| | | Rainfall running off fueling areas, and rainfall running onto and off fueling area | Fuel oil | |

ATTACHMENT K - STORMWATER MONITORING PROGRAM AND REPORTING REQUIREMENTS

1. Implementation Schedule

The discharger shall continue to implement their existing Stormwater monitoring program and implement any necessary revisions to their Stormwater monitoring program in a timely manner, but in no case later than December 1, 2005. The discharger may use the monitoring results conducted in accordance with their existing Stormwater monitoring program to satisfy the pollutant/parameter reduction requirements in Section 5.c., below, and Sampling and Analysis Exemptions and Reduction Certifications in Section 10, below.

2. Objectives

The objectives of the monitoring program are to:

- a. Ensure that storm water discharges are in compliance with waste discharge requirements specified in Order No. R8-2005-0098.
- b. Ensure practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.
- c. Aid in the implementation and revision of the SWPPP required by Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2005-0098.
- d. Measure the effectiveness of best management practices (BMPs) to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges. Much of the information necessary to develop the monitoring program, such as discharge locations, drainage areas, pollutant sources, etc., should be found in the Storm Water Pollution Prevention Plan (SWPPP). The facility's monitoring program shall be a written, site-specific document that shall be revised whenever appropriate and be readily available for review by employees or Regional Water Board inspectors.

3. Non-Storm Water Discharge Visual Observations

- a. The discharger shall visually observe all drainage areas within their facility for the presence of unauthorized non-storm water discharges;
- b. The discharger shall visually observe the facility's authorized non-storm water discharges and their sources;

- c. The visual observations required above shall occur quarterly, during daylight hours, on days with no storm water discharges, and during scheduled facility operating hours¹. Quarterly visual observations shall be conducted in each of the following periods: January-March, April-June, July-September, and October-December. The discharger shall conduct quarterly visual observations within 6-18 weeks of each other.
- d. Visual observations shall document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge. Records shall be maintained of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2005-0098.

4. Storm Water Discharge Visual Observations

- a. With the exception of those facilities described in Section 4.d., below, the discharger shall visually observe storm water discharges from one storm event per month during the wet season (October 1-May 30). These visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained storm water shall occur at the time of release.
- b. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three (3) working days² without storm water discharges and that occur during scheduled facility operating hours.
- c. Visual observations shall document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records shall be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2005-0098.
- d. The discharger with storm water containment facilities shall conduct monthly inspections of their containment areas to detect leaks and ensure maintenance of adequate freeboard. Records shall be maintained of the inspection dates, observations, and any response taken to eliminate leaks and to maintain adequate freeboard.

¹ "Scheduled facility operating hours" are the time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.

² Three (3) working days may be separated by non-working days such as weekends and holidays provided that no storm water discharges occur during the three (3) working days and the non-working days.

5. Sampling and Analysis

- a. The discharger shall collect storm water samples during the first hour of discharge from (1) the first storm event of the wet season, and (2) at least one other storm event in the wet season. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is released. The discharger that does not collect samples from the first storm event of the wet season are still required to collect samples from two other storm events of the wet season and shall explain in the "Annual Stormwater Report" (see Section 12, below) why the first storm event was not sampled.
- b. Sample collection is only required of storm water discharges that occur during scheduled facility operating hours and that are preceded by at least (3) three working days without storm water discharge.
- c. The samples shall be analyzed for:
 - (1) Total suspended solids (TSS) pH, specific conductance, and total organic carbon (TOC). Oil and grease (O&G) may be substituted for TOC;
 - (2) Toxic chemicals and other pollutants that are likely to be present in storm water discharges in significant quantities. If these pollutants are not detected in significant quantities after two consecutive sampling events, the discharger may eliminate the pollutant from future sample analysis until the pollutant is likely to be present again;
 - (3) The discharger is not required to analyze a parameter when either of the two following conditions are met: (a) the parameter has not been detected in significant quantities from the last two consecutive sampling events, or (b) the parameter is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the discharger's evaluation of the facilities industrial activities, potential pollutant sources, and SWPPP; and
 - (4) Other parameters as required by the Regional Water Board.

6. Sample Storm Water Discharge Locations

- a. The discharger shall visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the facility's storm water discharges from the storm event.
- b. If the facility's storm water discharges are commingled with run-on from surrounding areas, the discharger should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the facility's storm water discharges from the storm event.

- c. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfalls), the discharger shall identify and collect samples from other locations that represent the quality and quantity of the facility's storm water discharges from the storm event.
- d. The discharger that determines that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (1) collect samples from a reduced number of substantially identical drainage areas, or (2) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. The discharger must document such a determination in the annual Stormwater report.

7. Visual Observation and Sample Collection Exceptions

The discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until the minimum requirements of Sections 4. and 5., above, are completed with the following exceptions:

- a. The discharger is not required to collect a sample and conduct visual observations in accordance with Section 4 and Section 5, above, due to dangerous weather conditions, such as flooding, electrical storm, etc., when storm water discharges begin after scheduled facility operating hours or when storm water discharges are not preceded by three working days without discharge. Visual observations are only required during daylight hours. The discharger that does not collect the required samples or visual observations during a wet season due to these exceptions shall include an explanation in the "Annual Stormwater Report" why the sampling or visual observations could not be conducted.
- b. The discharger may conduct visual observations and sample collection more than one hour after discharge begins if the discharger determines that the objectives of this section will be better satisfied. The discharger shall include an explanation in the "Annual Stormwater Report" why the visual observations and sample collection should be conducted after the first hour of discharge.

8. Alternative Monitoring Procedures

The discharger may propose an alternative monitoring program that meets Section 2, above, monitoring program objectives for approval by the Regional Water Board's Executive Officer. The discharger shall continue to comply with the monitoring requirements of this section and may not implement an alternative monitoring plan until the alternative monitoring plan is approved by the Regional Water Board's Executive Officer. Alternative monitoring plans are subject to modification by the Regional Water Board's Executive Officer.

9. Monitoring Methods

- a. The discharger shall explain how the facility's monitoring program will satisfy the monitoring program objectives of Section 2., above. This shall include:
 - (1) Rationale and description of the visual observation methods, location, and frequency;
 - (2) Rationale and description of the sampling methods, location, and frequency; and
 - (3) Identification of the analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges. This shall include justification that the method detection limits are adequate to satisfy the objectives of the monitoring program.
- b. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including the discharger's own field instruments for measuring pH and Electro-conductivity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in Order No. R8-2005-0098 or by the Regional Water Board's Executive Officer. All metals shall be reported as total recoverable metals or unless otherwise specified in Order No. R8-2005-0098. With the exception of analysis conducted by the discharger, all laboratory analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The discharger may conduct their own sample analyses if the discharger has sufficient capability (qualified employees, laboratory equipment, etc.) to adequately perform the test procedures.

10. Sampling and Analysis Exemptions and Reductions

A discharger who qualifies for sampling and analysis exemptions, as described below in Section 10.a.(1) or who qualifies for reduced sampling and analysis, as described below in Section 10.b., must submit the appropriate certifications and required documentation to the Regional Water Board prior to the wet season (October 1) and certify as part of the annual Stormwater report submittal. A discharger that qualifies for either the Regional Water Board or local agency certification programs, as described below in Section 10.a.(2) and (3), shall submit certification and documentation in accordance with the requirements of those programs. The discharger who provides certification(s) in accordance with this section are still required to comply with all other monitoring program and reporting requirements. The discharger shall prepare and submit their certification(s) using forms and instructions provided by the State Water Board, Regional Water Board, or local agency or shall submit their information on a form that contains equivalent information. The discharger whose facility no longer meets the certification conditions must notify the Regional Water Board's Executive Officer (and local agency) within 30 days and immediately comply with Section 5., Sampling and Analysis requirements. Should a Regional Water Board (or local agency) determine that a certification does not meet the conditions set forth below, the discharger must immediately comply with the Section 5., Sampling and Analysis requirements.

a. Sampling and Analysis Exemptions

A discharger is not required to collect and analyze samples in accordance with Section 5., above, if the discharger meets all of the conditions of one of the following certification programs:

(1) No Exposure Certification (NEC)

This exemption is designed primarily for those facilities where all industrial activities are conducted inside buildings and where all materials stored and handled are not exposed to storm water. To qualify for this exemption, the discharger must certify that their facilities meet all of the following conditions:

- (a) All prohibited non-storm water discharges have been eliminated or otherwise permitted.
- (b) All authorized non-storm water discharges have been identified and addressed in the SWPPP.
- (c) All areas of past exposure have been inspected and cleaned, as appropriate.
- (d) All significant materials related to industrial activity (including waste materials) are not exposed to storm water or authorized non-storm water discharges.
- (e) All industrial activities and industrial equipment are not exposed to storm water or authorized non-storm water discharges.
- (f) There is no exposure of storm water to significant materials associated with industrial activity through other direct or indirect pathways such as from industrial activities that generate dust and particulates.
- (g) There is periodic re-evaluation of the facility to ensure conditions (a), (b), (d), (e), and (f) above are continuously met. At a minimum, re-evaluation shall be conducted once a year.

(2) Regional Water Board Certification Programs

The Regional Water Board may grant an exemption to the Section 5. Sampling and Analysis requirements if it determines a discharger has met the conditions set forth in a Regional Water Board certification program. Regional Water Board certification programs may include conditions to (a) exempt the discharger whose facilities infrequently discharge storm water to waters of the United States, and (b) exempt the discharger that demonstrate compliance with the terms and conditions of Order No. R8-2005-0098.

(3) Local Agency Certifications

A local agency may develop a local agency certification program. Such programs must be approved by the Regional Water Board. An approved local agency program may either grant an exemption from Section 5. Sampling and Analysis requirements or reduce the frequency of sampling if it determines that a discharger has demonstrated compliance with the terms and conditions of the Industrial Activities Storm Water General Permit Order No. 97-03-DWQ which was adopted by the State Water Resources Control Board on April 17, 1997.

b. Sampling and Analysis Reduction

- (1) A discharger may reduce the number of sampling events required to be sampled for the remaining term of Order No. R8-2005-0098 if the discharger provides certification that the following conditions have been met:
 - (a) The discharger has collected and analyzed samples from a minimum of six storm events from all required drainage areas;
 - (b) All prohibited non-storm water discharges have been eliminated or otherwise permitted;
 - (c) The discharger demonstrates compliance with the terms and conditions of the Order No. R8-2005-0098 for the previous two years (i.e., completed Annual Stormwater Reports, performed visual observations, implemented appropriate BMPs, etc.);
 - (d) The discharger demonstrates that the facility's storm water discharges and authorized non-storm water discharges do not contain significant quantities of pollutants; and
 - (e) Conditions (b), (c), and (d) above are expected to remain in effect for a minimum of one year after filing the certification.
- (2) Unless otherwise instructed by the Regional Water Board, the discharger shall collect and analyze samples from two additional storm events during the remaining term of Order No. R8-2005-0098 in accordance with Table A, below. The discharger shall collect samples of the first storm event of the wet season. The discharger that does not collect samples from the first storm event of the wet season shall collect samples from another storm event during the same wet season. The discharger that does not collect a sample in a required wet season shall collect the sample from another storm event in the next wet season. The discharger shall explain in the "Annual Stormwater Report" why the first storm event of a wet season was not sampled or a sample was not taken from any storm event in accordance with the Table A schedule, below.

| Table A REDUCED MONITORING SAMPLING SCHEDULE | | |
|---|--|---------------------------|
| Discharger Filing Sampling Reduction Certification By | Samples Shall be Collected and Analyzed in these wet seasons | |
| | Sample 1 | Sample 2 |
| Sept. 1, 2005 | Oct. 1, 2006-May 31, 2007 | Oct. 1, 2008-May 31, 2009 |

11. Records

Records of all storm water monitoring information and copies of all reports (including the Annual Stormwater Reports) required by Order No. R8-2005-0098 shall be retained for a period of at least five years. These records shall include:

- a. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;
- b. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;
- c. Flow measurements or estimates;
- d. The date and approximate time of analyses;
- e. The individual(s) who performed the analyses;
- f. Analytical results, method detection limits, and the analytical techniques or methods used;
- g. Quality assurance/quality control records and results;
- h. Non-storm water discharge inspections and visual observations and storm water discharge visual observation records (see Sections 3. and 4., above);
- i. Visual observation and sample collection exception records (see Section 5.a, 6.d, 7, and 10.b.(2), above);
- j. All calibration and maintenance records of on-site instruments used;
- k. All Sampling and Analysis Exemption and Reduction certifications and supporting documentation (see Section 10);

1. The records of any corrective actions and follow-up activities that resulted from the visual observations.

12. Annual Report

The discharger shall submit an Annual Stormwater Report by July 1 of each year to the Executive Officer of the Regional Water Board and to the local agency (if requested). The report shall include a summary of visual observations and sampling results, an evaluation of the visual observation and sampling and analysis results, laboratory reports, the Annual Comprehensive Site Compliance Evaluation Report required in Section 9. of Attachment "J" of Order No. R8-2005-0098, an explanation of why a facility did not implement any activities required by Order No. R8-2005-0098 (if not already included in the Evaluation Report), and records specified in Section 11., above. The method detection limit of each analytical parameter shall be included. Analytical results that are less than the method detection limit shall be reported as "less than the method detection limit". The discharger shall prepare and submit their Annual Stormwater Reports using the annual report forms provided by the State Water Board or Regional Water Board or shall submit their information on a form that contains equivalent information.

13. Watershed Monitoring Option

Regional Water Boards may approve proposals to substitute watershed monitoring for some or all of the requirements of this section if the Regional Water Board finds that the watershed monitoring will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of Order No. R8-2005-0098.

**ATTACHMENT L - City of Beaumont and San Timoteo Watershed Management Authority
 Maximum Benefit Commitments**

| Description of Commitment | Compliance Date – as soon as possible, but no later than |
|---|---|
| 1. Surface Water Monitoring Program <ul style="list-style-type: none"> a. Submit Draft Monitoring Program to Regional Board b. Implement Monitoring Program c. Quarterly data report submittal d. Annual data report submittal | <ul style="list-style-type: none"> a. February 24, 2005 b. Within 30 days from Regional Board approval of monitoring plan c. April 15, July 15, October 15, January 15 d. February 15th |
| 2. Groundwater Monitoring Program <ul style="list-style-type: none"> a. Submit Draft Monitoring Program to Regional Board b. Implement Monitoring Program c. Annual data report submittal | <ul style="list-style-type: none"> e. February 24, 2005 a. Within 30 days from Regional Board approval of monitoring plan b. February 15th |
| 3. Desalter(s) and Brine Disposal Facilities <ul style="list-style-type: none"> a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to be operational as soon as possible but no later than 7 years from date of Regional Board approval of plan/schedule. b. Implement the plan and schedule | <ul style="list-style-type: none"> a. Within 6 months of either of the following: <ul style="list-style-type: none"> i. When Beaumont's effluent 5-year running average TDS exceeds 480 mg/L; and/or ii. When volume weighted average concentration in the Beaumont MZ of TDS exceeds 320 mg/L b. Within 30 days from Regional Board approval of plan/schedule |
| 4. Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes. The non-potable supply shall comply with a 10-year running average TDS concentration of 330 mg/L or less | <i>January 24, 2015</i> |

| Description of Commitment | Compliance Date – as soon as possible, but no later than |
|--|---|
| <p>5. Recycled water recharge ¹</p> <p>The recharge of recycled water in the Beaumont or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the “maximum benefit” objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).</p> <ul style="list-style-type: none"> a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge. b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of City of Beaumont/STWMA enhanced recharge facilities/programs | <p>Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.</p> <ul style="list-style-type: none"> a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge. b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge. |
| 6. Ambient groundwater quality determination | July 1, 2005 and every 3 years thereafter |
| 7. Replace denitrification facilities (if necessary to comply with TIN wasteload allocation specified in CITATION FOR EFFLUENT LIMIT) | Compliance with 6 mg/L TIN limitation to be achieved by January 24, 2008 |

¹ The Discharger has not yet proposed specific plans to implement recycled water recharge projects. Accordingly, appropriate requirements for such projects are not specified in this Order. Therefore, compliance with the recycled water recharge maximum benefit commitment is not now required to assure effective maximum benefit implementation. This Order will be reconsidered and revised as necessary to implement relevant maximum benefit commitments if and when the Discharger proposes recycled water projects.

| Description of Commitment | Compliance Date – as soon as possible, but no later than |
|--|---|
| <p>8. City of Beaumont recycled water quality improvement plan and schedule</p> <p>a. Submit plan and schedule</p> <p>b. Implement plan and schedule</p> | <p>a. 60 days after the TDS 12-month running average effluent quality equals or exceeds 480 mg/L for 3 consecutive months and/or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once facility/operational changes needed to achieve 6 mg/L TIN are in place)</p> <p>b. Upon approval by Regional Board</p> |
| <p>9. Remove/reduce the discharge of Beaumont’s effluent from the unlined portion of San Timoteo Creek</p> <p>a. Submit proposed plan/schedule</p> <p>b. Implement plan/schedule</p> | <p>a. July 24, 2005</p> <p>b. Upon Regional Board approval</p> |